



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/828,893	04/20/2004	Ronald J. Yaeger	P-B199-CIP	5851
29222	7590	03/30/2007		
W. THOMAS TIMMONS 1320 PRUDENTIAL DRIVE SUITE 208 DALLAS, TX 75235-4117			EXAMINER COLE, ELIZABETH M	
			ART UNIT	PAPER NUMBER
			1771	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/30/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/828,893	YAEGER ET AL.	
	Examiner	Art Unit	
	Elizabeth M. Cole	1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-26 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-28 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Polovina, U.S. Patent No. 3,798,057. Polovina discloses a fibrous web which is impregnated with a composition comprising a polyepoxy compound. See col. 1, lines 61- col. 2, line 3; col. 3, lines 6-26. The impregnating composition corresponds to the claimed continuous phase. The impregnated fibrous web is useful as a water contact body for evaporative coolers. The impregnating composition can further comprise fillers which correspond to the claimed discontinuous phase in an amount of up to 50 percent. See col. 3, lines 27-49. The finished product comprises 10-30 percent of the impregnating composition by weight of the finished product. See col. 4, lines 44-46. Polovina differs from the claimed invention because it does not particularly disclose the claimed non polar solubility parameter, the polar solubility parameter, the hydrogen bond solubility parameter, the surface tension, interfacial tension or that the continuous phase is cationic. However, since Polovina discloses the same materials which are used for the same purpose, it is reasonable to presume that the materials of Polovina would meet the claimed property limitations. When the reference discloses all the limitations of a claim except a property or function, and the examiner cannot determine whether or not the reference inherently

Art Unit: 1771

possesses properties which anticipate or render obvious the claimed invention but has basis for shifting the burden of proof to applicant as in *In re Fitzgerald*, 619 F.2d 67, 205 USPQ 594 (CCPA 1980). See MPEP § § 2112- 2112.02.

3. Applicant's arguments filed 1/3/07 have been fully considered but they are not persuasive. Applicant argues that Pall and Polovina both specify water soluble epoxy and other polymers and resins in their patents, while the instant claims require only water insoluble polymers and resins. However, Polovina does not appear to describe water soluble polymers. The examiner cannot find reference in Polovina to water solubility. Further, the instant claims do not require that the polymers be insoluble in water. The instant claims set forth ranges of solubility parameters for polar solvents. As set forth in the action above, the examiner cannot test the materials of Pall and Polovina to see if they fall within the ranges claimed, however, since the materials appear to be the same, the burden is shifted to applicant. With regard to Pall, it is agreed that Pall does teach water soluble polymers. Applicant has stated in the specification that the three solubility parameters set forth in claim 1 define conditions of water insolubility for the resin. Therefore, the rejection in view of Pall is withdrawn.

4. Applicant argues that Pall and Polovina are for different uses and design needs. However, the references are not combined into a 103 rejection. They are used as 102/103 art, and therefore the references do not need to be in the same field with respect to each other, or with respect to the claimed invention, as long as the structures set forth in the references are the same as the instantly claimed structures, and the structures were be capable of performing the intended use of the claimed structure.

Art Unit: 1771

5. Applicant argues that the instant invention describes how to chemically modify and hybridize the chemical structure of resins and polymers to have water insolubility and other factors to provide good performance. However, as set forth above, the claims recite various ranges of solubility in particular terms. The examiner is not able to test the materials of the prior art to see whether or not they fall within the claimed ranges. Therefore the burden is shifted to applicant.

6. Applicant argues that the claims of Polovina only show one embodiments which is within the claimed range. However, the Polovina reference is not limited to what is shown in the claims. Polovina teaches the claimed amounts.

7. Applicant states that Polovina teaches water soluble resins. However, the examiner cannot find this statement in Polovina.

8. Applicant argues that the materials of Polovina are not generally used today due to lack of availability and toxicological, environmental and health restrictions. However, the teachings of Polovina are set forth in the reference, regardless of whether the materials used are available or not.

9. Applicant argues that the instant invention gives methods of how to determine whether the resin has the technical properties for use within the invention. However, the instant claims are drawn to a structure wherein the resin has particular properties. When an invention is described in this way, and the examiner finds art that appears to be the same as the invention except that the properties are not described in the same way, the examiner cannot determine whether or not the product of the prior art has the same properties and therefore the burden is shifted to applicant. The claims are not

Art Unit: 1771

drawn to a method of ascertaining whether particular resins are suitable or not, but are instead claiming a particular structure using resins which have particular properties.

10. Applicant's further comparisons of the claimed invention to Pall have been considered but, as set forth above, since Applicant has stated that the claims define water insoluble resins and Pall clearly teaches and requires the use of a water soluble resin, the rejection in view of Pall is withdrawn and therefore the arguments regarding Pall are not further addressed.

11. With regard to claims 27 and 28, these claims were included on the same page as the abstract which was not entered since the abstract should be on a separate paper. The action will be made non final since those claims were not previously examined, however, the rejections previously set forth with regard to the other claims apply equally to claims 27 and 28.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth M. Cole whose telephone number is (571) 272-1475. The examiner may be reached between 6:30 AM and 6:00 PM Monday through Wednesday, and 6:30 AM and 2 PM on Thursday.

Mr. Terrel Morris, the examiner's supervisor, may be reached at (571) 272-1478.


Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

The fax number for all official faxes is (571) 273-8300.

Application/Control Number: 10/828,893

Page 6

Art Unit: 1771

A handwritten signature in black ink, appearing to read "Elizabeth M. Cole". The signature is fluid and cursive, with the first name being the most prominent.

Elizabeth M. Cole
Primary Examiner
Art Unit 1771

e.m.c